



**Karolinska  
Institutet**

Course syllabus for

# **Diet, Physical Activity and Fitness - Assessment and Evaluation, 7.5 credits**

Kost, fysisk aktivitet och fitness - mätmetodik och utvärdering, 7.5 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

Please note that the course syllabus is available in the following versions:

[Autumn2018](#) , [Autumn2019](#) , [Autumn2020](#) , [Autumn2021](#) , [Spring2024](#)

Course code	3NT002
Course name	Diet, Physical Activity and Fitness - Assessment and Evaluation
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Nutrition Science
Level	AV - Second cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Biosciences and Nutrition
Decided by	Utbildningsnämnden BioNut
Decision date	2018-02-26
Revised by	Education committee BioNut
Last revision	2024-06-13
Course syllabus valid from	Spring 2024

## **Specific entry requirements**

A Bachelor's degree or a professional degree equivalent to a Swedish Bachelor's degree of at least 180 credits in biomedicine, cellular and molecular biology, pharmaceuticals, medicine, nutrition, or the equivalent. And proficiency in English equivalent to English B/English 6.

## **Objectives**

Upon completion of the course, the student should be able to:

- suggest, justify and critically discuss the appropriateness of the methods covered in the course in different given situations.
- apply the latest (global) physical activity and nutrient recommendations and be able to quantify populations at risk.
- apply the concepts of the quality and quantitative aspects in the dose-response relationship between physical (in)activity and health.

- design a brief assessment tool for use in nutrition epidemiology.
- carry out, supervise and evaluate outcomes of selected tests for cardiorespiratory fitness and body strength.
- calculate sample size estimates, effect sizes and statistical power for different study designs and assessment methods.
- carry out appropriate statistical tests using SPSS to evaluate validity and precision of dietary-, physical activity- and body composition assessment methods.
- write a short report according to standard scientific structure.

## Content

This course aims to give the student a deeper understanding of modern methods for assessing dietary intake, physical (in)activity and fitness, both at the individual and group level. This course covers study design, choice of assessment methodology, body composition, recommendations, calculation of study power and number of measurement days. Data is collected on all students and statistical software will be used to compare methods and assess their validity and precision. The course also provides a deeper understanding of how to evaluate reported nutrient intake and physical activity for different groups in comparison to relevant reference values. The role of quantitative and qualitative aspects of physical activity to promote (global) health and to prevent and treat disease is also covered.

## Teaching methods

This course consists of lectures (live and recorded), discussions, workshops and a number of practical assessments for physical activity and fitness, complemented with dietary data from the course "Diet and health - scientific basis, recommendations and sustainability" from earlier in the program.

## Examination

The examination consists of written and oral assignments, graded Pass/Fail, and individual written assignments, graded Pass with distinction/Pass/Fail. The grading criteria for all examinations are given in the study guide.

In the case of failed results, the assignment may be submitted a maximum of five more times. If the student has completed six failed examinations, no further examination opportunities will be given for that assignment.

A student who has failed two examinations for a course or part of a course, is entitled to have another examiner appointed unless special reasons speak against it.

**Compulsory participation:**

Assignments and seminars are mandatory. The course director assesses if and, in that case, how absence from compulsory parts can be compensated. Before the student has participated in all compulsory parts or compensated absence according with the course director's instructions, the student's results will not be registered in LADOK.

If there are special reasons, or need for adjustment for a student with a disability, the examiner may decide to depart from the syllabus's regulations on examination form, number of examination opportunities, possibility of complementation of or exemption from compulsory parts of the course, etc. Content and learning goals as well as the level of expected skills, knowledge and abilities must not be altered, removed or lowered.

## Transitional provisions

The course has been cancelled and was offered for the last time in the autumn semester of 2021.

## Other directives

The course language is English.

A course evaluation will be conducted according to guidelines decided by the Committee for Higher Education at KI.

Oral evaluation will be carried out during the course.

## Literature and other teaching aids

Reports, articles and other assigned literature will be specified in the study guide and electronically available.

*American College Of Sports Medicine*

**Acsms health-related physical fitness assessment**

Lippincott Williams And Wilkin, 2017 - 208 sidor

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